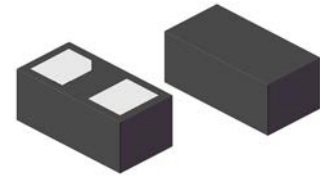
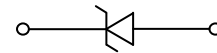


Features

- 63W peak pulse power ($t_p = 8/20\mu s$)
- Tiny DFN0603 package
- Unidirectional configuration
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance ($C_J=30pF$ typ.)
- Protection one data/power line to:
 - IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns) IEC
 - 61000-4-5 (Lightning) 4.5A (8/20 μs)



DFN0603



Schematic Diagram

Applications

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboards, Touchpads, Buttons)

Absolute Maximum Ratings ($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu S$)	P_{PP}	63	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30	kV
Peak Pulse Current ($t_P = 8/20\mu S$)	I_{PP}	4.5	A
Junction Temperature	T_J	-55 to +125	$^\circ C$
Storage temperature	T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics ($T_A=25^\circ C$ unless otherwise specified)

Parameter	mbol	Condition	Min	Typ	Max	Unit
Reverse Stand-off Voltage	V_{RWM}		-	-	5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6	6.8	-	V
Reverse Leakage Current	I_R	$V_R=5.0V$	-	0.01	0.5	μA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=4.5A$	-	11	14	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	30	-	pF

Typical Characteristic Curves

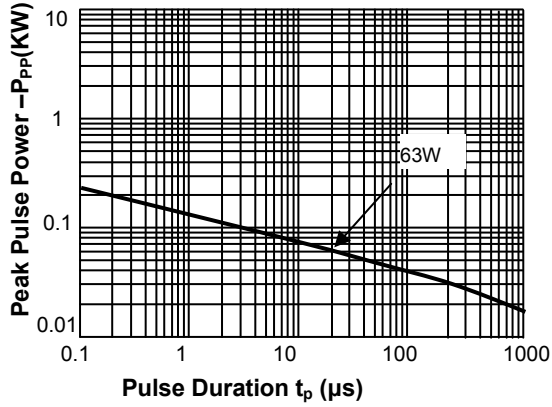


Figure 1. Peak Pulse Power Rating Curve

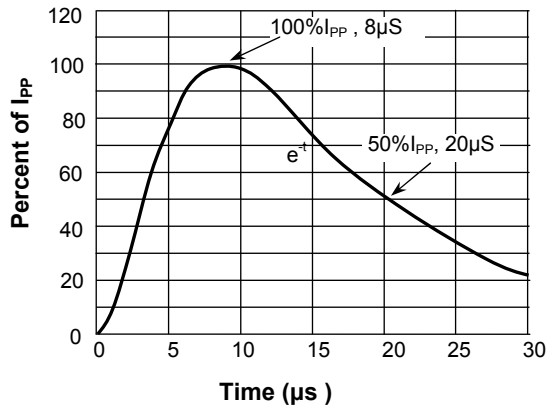


Figure 3. Pulse Waveform-8/20μs

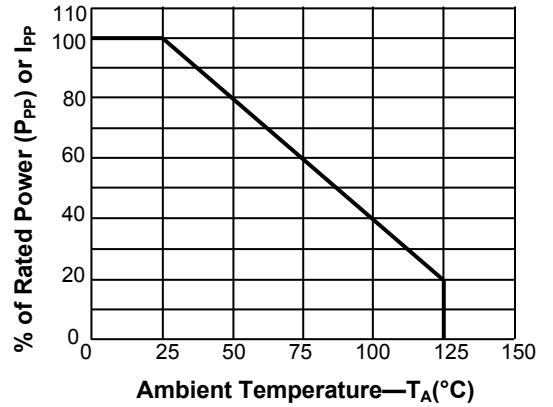


Figure 2. Pulse Derating Curve

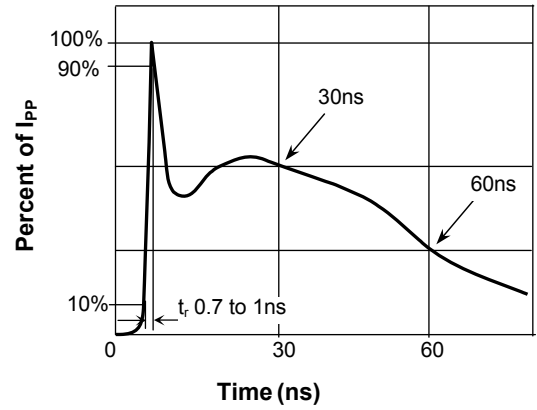
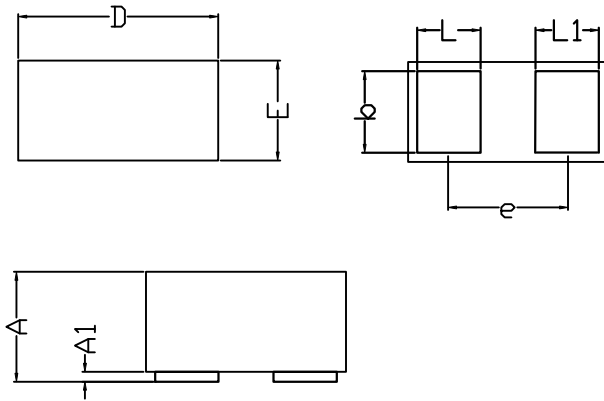


Figure 4. Pulse Waveform-ESD (IEC61000-4-2)

Package Outline Dimensions DFN0603



Symbol	Dimensions in millimeters		
	Min	Nom	Max
A	0.23	-	0.33
A1	0.00	-	0.05
D	0.55	0.60	0.65
E	0.25	0.30	0.35
b	0.215	0.245	0.275
L	0.13	0.18	0.23
L1	0.13	0.18	0.23
e	0.355 BSC		

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSEN5U300	DFN0603	P	Tape & Reel	15,000pcs / Reel	RoHS compliant